**Fibromyalgia Case Study**

Cynthia is a 51-year-old woman who was in a car accident ten years ago and suffered a spinal injury. Although in time and with physical therapy she had been able to go back to work as a copy editor, she had to give up hiking and the other outdoor activities she’d enjoyed because it aggravated the chronic pain she continued to feel. Over time, Cynthia grew depressed and after discussing her situation with her adult daughter, she started to see a psychiatrist.

Cynthia’s psychiatrist seemed interested in the fact that she continued to have chronic pain even though her orthopedic doctors had said she was completely recovered from her injuries. Her psychiatrist referred her to a neurologist. The neurologist examined Cynthia, and asked her some questions about her accident and pain, and then gave her a diagnosis. “I think you may have fibromyalgia” she said.

Cynthia had heard of fibromyalgia because she’d seen ads for drugs that are used to treat it on TV, but she wasn’t sure what it was. Her neurologist wrote her a prescription for one of these, a drug called Lyrica. She knew that pain medications had serious side effects and could cause dependency, but when she expressed these reservations to her neurologist, he told her that this drug worked in a different way.

“Lyrica works by binding to channels called voltage-dependent calcium channels in your brain and spinal cord. This decreases their ability to communicate through chemical signals. Since pain is transmitted through these chemical signals, Lyrica is an effective treatment for the pain associated with fibromyalgia.”

Use the information from this sheet and any other reliable resources available to you to answer the following questions.

**Questions**

1. Explain how a drug that interferes with the functioning of voltage-gated calcium channels could decrease the transmission of painful signals.

2. Lyrica has a very broad range of side effects associated with its use, including dizziness, blurred vision, euphoria, changes in appetite, dry mouth, vomiting, tremors, and others. Why do you think Lyrica has such a broad range of side effects?

3. Chronic pain is frequently found in combination with psychiatric problems. Knowing what you know about somatosensory anatomy, why do you think this might be the case?